# **Final Report**

## Arizona Grain Research and Promotion Council

October, 2004

**Small Grain Advisory** 

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#### FINAL REPORT

#### Arizona Grain Research and Promotion Council October, 2004

TITLE: Small Grain Advisory

INVESTIGATOR: Mike Ottman, Extension Agronomist, Univ. of Arizona

DURATION: November, 2003 to November, 2004

BACKGROUND: Cooperative Extension has a history of sending advisories to their clientele. Examples include the Alfalfa Report and Cotton Advisory. These mailings help growers make crop management decisions. This is the second year of the Small Grain Advisory.

OBJECTIVES: Distribute a bi-weekly Small Grain Advisory.

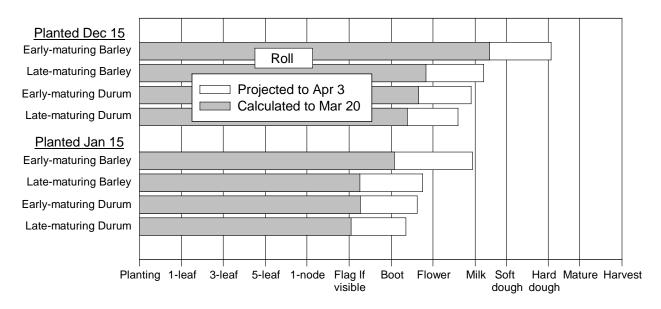
DESCRIPTION OF THE WORK: A Small Grain Advisory was developed for Yuma, La Paz, Mohave, Maricopa, Pinal, Pima, and Graham Counties and distributed on a bi-weekly basis through County Cooperative Extension Offices. The advisories began in January and ended in May (Table 1). The advisories contain information on crop growth stage and water use throughout the season. Weather data from AZMET previously developed equations were used to estimate crop growth stage and water use.

RESULTS: About 9 Small Grain Advisories for 12 locations (see table below) were developed and mailed through Extension mailing lists. Publications were also mailed on how to use the Small Grain Advisory for determining growth stage of a particular variety, when to irrigate, and when to initiate other management operations. In addition to being mailed, the advisories were also posted on my website (<a href="http://ag.arizona.edu/forageandgrain/smalladv.html">http://ag.arizona.edu/forageandgrain/smalladv.html</a>). An example advisory is attached.

County	Location	Beginning	Ending	Number of
		date	date	Advisories
Yuma	Roll	Jan 11	May 2	9
	Yuma Valley	Jan 11	May 2	9
La Paz	Parker	Jan 11	May 2	9
Mohave	Mohave	Jan 11	May 2	9
Maricopa	Paloma	Jan 11	May 2	9
	Buckeye	Jan 11	May 2	9
	Harquahala	Jan 11	May 2	9
	Queen Creek	Jan 11	May 2	9
Pinal	Pinal	Jan 11	May 2	9
Pima	Marana	Jan 11	May 2	9
Graham	Safford	Jan 11	May 2	9
	Bonita	Feb 22	May 2	6

### Roll Small Grain Advisory March 21, 2004

### **Crop Development**



### Crop Water Use

				Water use (inches)	
	Planting			Calculated	Projected
Location	date	Crop	Variety	Mar 7 – Mar 20	Mar 21 – Apr 3
Roll	Dec 15	Barley	Early	2.87	3.50
			Late	2.50	3.17
		Durum	Early	2.55	3.23
			Late	2.48	3.15
	Jan 15	Barley	Early	2.00	2.75
		,	Late	1.71	2.30
		Durum	Early	1.76	2.35
			Late	1.72	2.29

Effective **rooting depth** on Mar 20 and Apr 3 is estimated at <u>44 and 48 inches</u> for a Dec 15 planting and <u>35 and 43 inches</u> for a Jan 15 planting. **Precipitation** between Mar 7 and Mar 20 totaled <u>0.00 inches</u>.

(Note: This advisory was developed by Mike Ottman, Agronomist, University of Arizona with AZMET weather data and funded by Arizona Cooperative Extension and the Arizona Grain Research and Promotion Council.)